# Force MTU Power Systems Pvt. Ltd



## Fm500





## 500 kVA, 415 V, 50 Hz, Prime Duty Diesel Generator



#### **Force MTU Benefit:**

- Global product design, single factory manufacturing product for the world
- Best in class smallest foot print
- Services of the future:
  - Service call request available on your finger tip
  - Genset health monitoring through mobile
     App and remote desktop
  - Remote diagnostic
- 2 Years or 5000 Hours warranty on entire Diesel Generator System

### **Special Features:**

- Fully authority CRDI engine with superior fuel economy and Industry leading average load factor
- Silencer Placement inside enclosure
- Digital Voltage & Frequency regulation
- Remote monitoring & diagnosis
- Major Service points on one side of the system
- Longer maintenance interval 500 Hours or 2 Years
- No schedule overhaul

### Standard features:

- Single skid mounted Engine, Radiator coupled to Alternator
- Radiator with 50°C ambient temperature
- Dry type air filter with restriction indicator
- Integrated Fuel tank with 09 hours capacity
- Fuel Cooler & Fuel pre filter with water Separator
- AC Panel and DC Control Panel mounted inside enclosure



FM500 Diesel Generator Rating					
500 kVA	400 kWe	3 Phase	415 V	50 Hz	0.8 PF

#### **Conformance Standards**

• ISO 3046-1 • BS 5514 • ISO 8528 -1 • AS 2789 • DIN 6271

#### Definition as per ISO 8528-1 (PRP)

Prime power is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer.

#### Definition as per ISO 8528-1 (ESP)

Emergency standby power is defined as the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers.

Engine	
Manufacturer	MTU
Model	10V1600G20F
Туре	4-cycle
Arrangement	10-V
Displacement: L	17.5
Bore: mm	122
Stroke: mm	150
Compression ratio	17.5
Rated rpm	1500
Engine governor	ECU 8
Gross power: kWm	448
Air cleaner	Dry

Fuel System	
Max. fuel flow: Ltrs/h	342
Fuel tank capacity: Ltrs	900

Fuel Consumption		
At 100% of power Rating: Ltrs/ Hr	101.5	
At 75% of Power Rating: Ltrs/Hr	81.8	
At 50% of Power Rating: Ltrs/Hr	58.3	
Liquid Capacity		
Total oil system: Ltrs	60.5	
Total coolant capacity: Ltrs	94	

Control Panel		
Microprocessor based Controller	AMF Ready	
Circuit Breaker	4P, MCCB	

Generator	
Generator brand	4 Pole, Brushless
Insulation class	H-class
Bearing	single bearing
Enclosure	IP23 M
Voltage regulation	± 0.25%
Exciting system	self-excited
AVR Type	Digital
Winding Pitch	2/3
Rated Speed	1500
Rated Voltage	415V
Alternator Efficiency	95 %

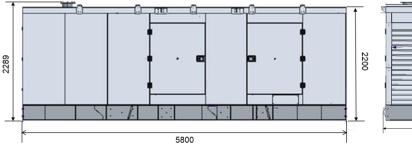
Electrical	
Electric system volts DC	24
Number of batteries	2
Capacity: Ah	2x 110

Cooling/Radiator System	
Ambient capacity of radiator: °C	50
Pressure on rad. exhaust: kPa	0.2
Heat rejection to coolant: kW	216

Air Requirements		
Aspirating: m3/min	27	
Cooling air flow: m3/s	10.9	

Protection	
Engine	High coolant temperature
	Over Speed
	High Oil Pressure
Alternator	Over/Under voltage
	Over/Under Frequency
	Over current
	Short Circuit

Length	Width	Height	Weight
5800 mm	2098 mm	2200 mm	8000 Kg





Note:-Drawing above for illustration purposes only, based on standard enclosed. Please contact company representative for more details





# Force MTU Power Systems Pvt. Ltd. Mumbai-Pune Road, Akurdi

Mumbai-Pune Road, Akurdi, Pune 411 035, Maharashtra, India Visit us - <u>www.force-mtu.com</u>



